Case Study

Client: TRUIST ⊞

Peak Health is a high-touch, outcomes-based, lifestyle behavior change program that is Registered Nurse-led and data driven. Nurses deliver onsite, individualized health evaluation, coaching, and navigation with personalized goals to improve health and compliance with clinical care guidelines.

BB&T, now Truist, began using Peak Health in 1989. This case study highlights several achievements of the nurse-based employee wellness program at Truist based on the following:

- Improved Modifiable Risk Factors
- Improved Biometrics
- Improved Overall Health Status
- Sustained Results
- Optimized Medical Utilization
- Financial impact

Peak Health: Program Overview

The program is based on data and clinical grade science. It requires participants to complete a comprehensive set of labs and biometrics every year. Participants also must complete a Health Assessment which includes questions about their physical activity, diet, alcohol consumption, smoking, basic biometrics, and stress.

During a participant visit, a Peak Health nurse will review all of these data points and conduct tests to evaluate the participant's cardiovascular fitness and body fat percentage. The nurse considers all of these factors to "phase" the participant according to their health risk, with Phase 1 being the unhealthiest and Phase 5 being most healthy. The nurse also coaches participants on ways to improve their phase score, encourages them for actively pursuing their health goals and previous advice, and suggests ways to address conditions like stress, specific diseases and conditions.

The nurses meet with a participant, more or less frequently based on their health status, behaviors, and risk factors, sometimes as often as every 4 months. In Truist's program, called "LifeForce," participants also receive discounts on their health insurance premium contribution according to their phase and other factors (e.g. salary band, # of family members on health plan).

Improved Modifiable Risk Factors

Oft-cited statistics from the Network for Excellence in Health Innovation and the University of Wisconsin Population Health Institute show that while medical care accounts for 88% of healthcare dollars spent, it only accounts for 20% of outcomes. In fact, 30% of outcomes are attributable to modifiable health behaviors such as smoking, alcohol consumption, physical activity, and sleep.

In the LifeForce program, a significant portion of the employee population is motivated to modify their behaviors for better health. This is because Peak Health nurses, as trusted clinical professionals, not only provide education and encouragement on healthier behavior, but also control health risk assessments that drive premium contribution discounts. This combination helps participants feel more accountable for their behaviors and motivates them to improve.

As shown in Table 1, the program has demonstrated significant impact on a variety of modifiable risk factors. The data show progress in eliminating risk factors through the course of participants' engagement in the program. For example, with obesity, 5,158 people were measured as obese when they entered the program, but by their last visit, 1,785 of those participants (35%) are no longer obese.

Table 1: Improving Modifiable Risk Factors
Elimination of Modifiable Risk Factors over Lifetime in the Program

Risk Factor	Initial # Starting Program With Risk Factor	Still At Risk	Risk Eliminated While In Program	% Risk Eliminated
Obesity[1]	5,158	3,373	1,785	35%
High Total Cholesterol[1]	1,424	703	721	51%
High Blood Pressure[1]	546	184	362	66%
Low HDL[1]	2,752	1,823	929	34%
High Blood Glucose[1]	3,242	2,386	856	28%
Poor Health[2]	14,721	4,731	9,990	68%
Using Tobacco[1]	1,082	494	588	54%
Not Using Seat Belt[1]	158	43	115	73%
Excessive Alcohol Use[1]	1,153	866	287	25%
Inactive[1]	5,938	703	5,235	88%
TOTALS	**36,174**	**12,920**	**20,868**	**58%**

[1] Mayo Clinic Health Assessment guidelines
 * Obesity: BMI >= 30
 * High cholesterol: >=240 mg/dL
 * High Blood Pressure: > 140/90 mm Hg
 * Low HDL (High Density Lipoprotein): < 40 mg/dL
 * Tobacco use
 * Excessive alcohol use: >= 14 drinks/week (men) or >= 7 drinks/week (women)
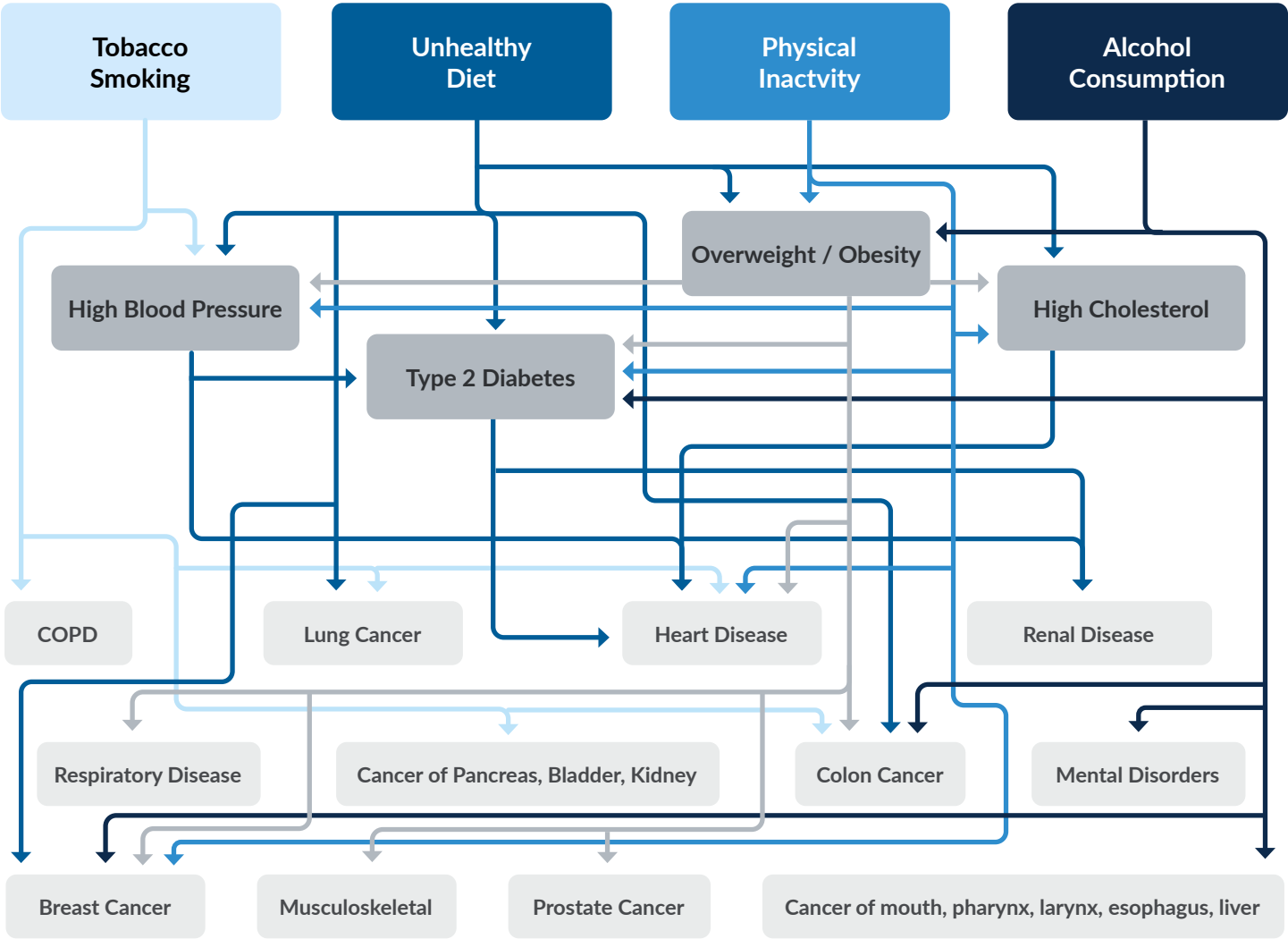 * Inactive: < 30 min of moderate activity 5 or more days / week, or < 60 min of vigorous activity weekly
 * High blood glucose: fasting blood glucose >= 100mg/dL; non-fasting blood glucose >= 140mg/dL

[2] Peak Health defines Poor Health as being placed in Phase 1 or Phase 2 according to the program's evaluation protocol

While some risk factors are self-reported, others can be measured, which shows these improvements are not merely subjective.

Ultimately, reduction in modifiable risk factors helps avoid the downstream risk of chronic disease as illustrated by Figure 1. The more we reduce the risk factors associated with chronic disease, the more we avoid the corresponding high costs.

Figure 1: Common Chronic Disease Risk Factors

Tobacco Smoking

Unhealthy Diet

Physical Inactvity

Alcohol Consumption

High Blood Pressure

Overweight / Obesity

High Cholesterol

Type 2 Diabetes

COPD

Lung Cancer

Heart Disease

Renal Disease

Respiratory Disease

Cancer of Pancreas, Bladder, Kidney

Colon Cancer

Mental Disorders

Breast Cancer

Musculoskeletal

Prostate Cancer

Cancer of mouth, pharynx, larynx, esophagus, liver

Improved Biometrics

As shown in Figure 2, the program has also resulted in progress on a variety of biometrics. This chart is based on 18,264 participants who have at least two sets of biometric data for the reporting period in order to make the comparison. The blue bars represent number of participants improving, based on the left vertical axis. The height of the light blue line at each blue bar represents the % improvement in the population, based on the right vertical axis. Clearly, on all factors, a significant portion of the population has made progress. Note: progressing in "Phase" means participants "improved" in their Peak Health phase score during the measured time period.

"Becoming a new mom is exhausting enough, let alone returning to the office. I thought my exhaustion was simply due to being a new mom, however a routine Peak Health appointment resulted in labs that identified a potential thyroid disease, and the need for further testing. It turned out I had Hashimoto's disease.

Without Peak Health annual labs, I may never have sought or found a solution. My energy has improved tremendously."

– Peak Participant

Figure 2: Biometric Progress for Participants in the Program for at least 1 year and with 2 data points (previous and last)
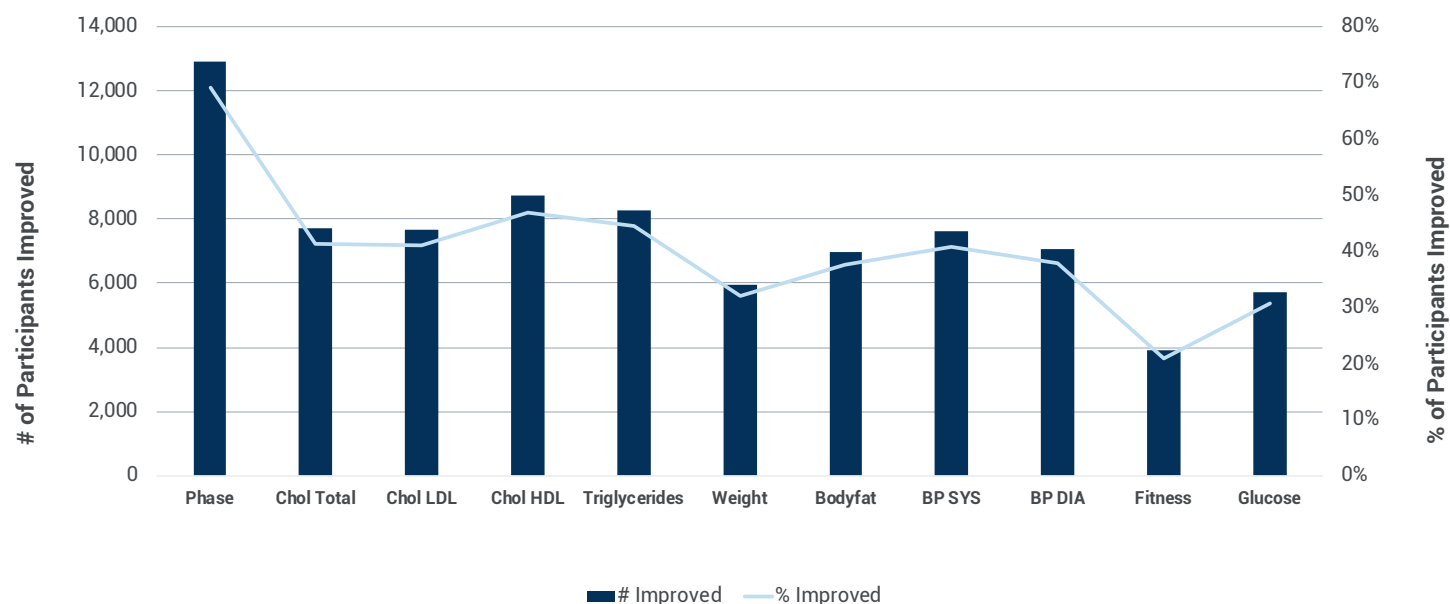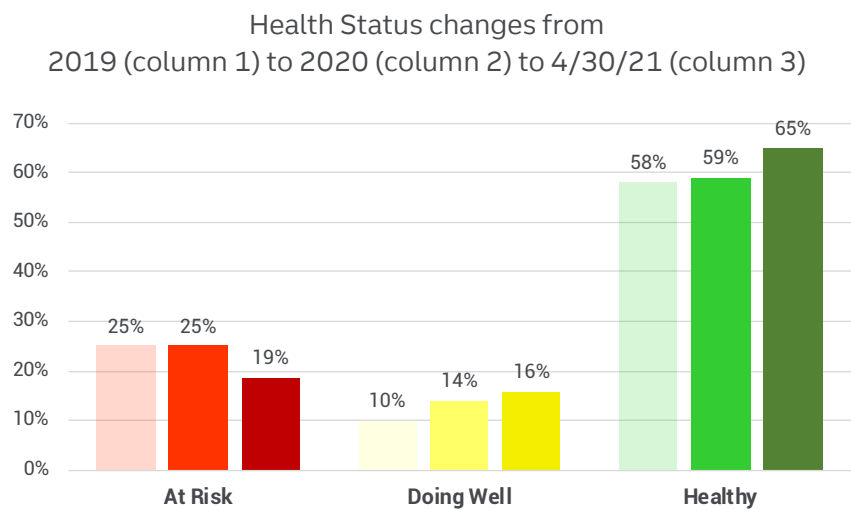

Improved Overall Health Status

As described earlier, participants are placed in a phase following their initial health risk assessment, and can then engage in healthier behaviors and/or improve their health in order to move up to a higher phase. Participants are placed in Phase 0 if they have enrolled in the program but have not yet met with the nurse for an evaluation. Participants in Phase 1 and Phase 2 are considered "At Risk," participants in Phase 3 are considered to be "Doing Well," and participants in Phase 4 and Phase 5 are considered "Healthy." Table 2 shows that the overall average phase has continued to improve over the tracking period, even as the number of enrolled participants increases. Figure 3 provides a visual of the same information from 2019 - April 2021.

Table 2: Phase and Health Status Distribution by Year From 2018 - Apr 2021

		Pending	At Risk		Doing Well	Healthy		
Snapshot	# Enrolled	% No Phase	% in Phase 1	% in Phase 2	% in Phase 3	% in Phase 4	% in Phase 5	Average Phase
2018	20,415	0%	5%	27%	10%	27%	31%	3.51
2019	21,078	6%	4%	21%	10%	17%	41%	3.75
2020	27,569	2%	1%	24%	14%	23%	35%	3.69
2021 thru 4/30	26,980	1%	1%	17%	16%	29%	36%	3.82

Health Status changes from
2019 (column 1) to 2020 (column 2) to 4/30/21 (column 3)

Sustained Results

A frequently asked question regarding wellness programs is whether or not results are sustainable. Figure 4 shows that the Peak Health program at Truist has delivered consistent results for program participants, regardless of how long they were in the program. In general, the number of participants considered to be "At Risk" was cut in half (from 36% down to 17-18%) over the measured period. Additionally, there has been a marked increase in the number of people in each cohort who have become healthy over that period. According to this data, the program sustainably improves health for a portion of the population.

Figure 4: Health Status Progress for Cohorts Separated by # of Years in Program

1-2 years   3-4 years   5-9 years
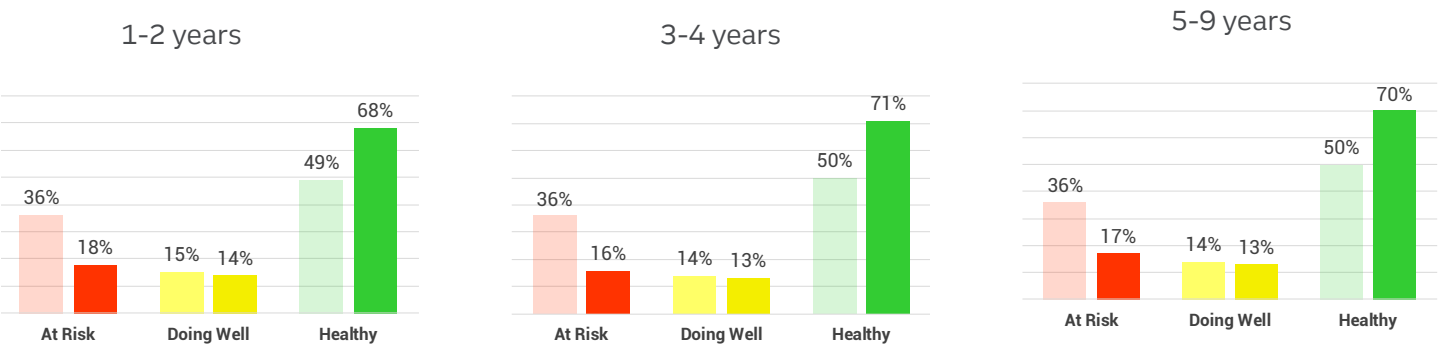
Optimized Medical Utilization

For self-insured employers like Truist, it is important to note that the Peak Health wellness program not only yields tangible results on employee health, but that this translates into optimal medical system utilization that ultimately results in lower claims, which can lead to lower insurance premiums.

Table 3 compares both participants and non-participants across both demographic risk and forward-looking risk. While the non-participants (who are younger, on average, than the participants) have an understandably lower demographic risk than participants, their forward-looking risk is actually higher than participants. We could therefore infer that because program participants are engaging in healthier behaviors and experiencing healthier outcomes, their overall forward-looking risk is actually lower, despite their higher demographic risk.

Table 3: Comparison of Demographic and Relative Risk for Program Participants and Non-Participants

	Demographic Risk	Avg Risk Score
Non-Participants	1.20	1.69
Participants	1.28	1.50

Further, Table 4 compares participants and non-participants across medical system utilization as well as predicted costs. On a normalized basis (i.e., per 1,000 employees), participants have had fewer hospital admissions and ER visits than non-participants, and more office visits. This is preferred behavior in terms of medical system utilization. We want employees to visit their doctors to complete gaps in care and not deteriorate to the point that they need to go to the ER and/or be admitted. Additionally, this utilization of the health system for preventative care (vs. reactive care in an ER or hospital) translates to lower costs. The last column of Table 4 supports this assertion, showing that non-participants are predicted to have higher costs than their program participant counterparts, despite their lower demographic risk.

Table 4: Comparison of Medical System Utilization and Predicted Costs for Program Participants vs. Non-Participants

	Admits / 1,000	ER visits / 1,000	Office Visits / 1,000	Predicted Cost
Non-Participants	63	237	3,917	$8,673
Participants	38	147	4,224	$8,562

Financial Impact

The trend in wellness programs is toward VOI (Value on Investment) instead of ROI (Return on Investment), partly because it is hard to quantify how many "heart attacks did not happen" or "how many diseases were avoided" as a result of wellness program participation. That said, much research has been conducted to quantify the potential financial impact of reducing modifiable risk factors such as smoking and obesity. It focuses on improvements such as reduction in excess medical claims, increase in productivity (i.e. decreased presenteeism), and decrease in absenteeism. For this case study, we focus on the first two areas of improvement.

Increased Productivity / Decreased Presenteeism

In terms of productivity, Riedel et al. have determined that each risk per employee results in $1,494 in productivity loss (based on an average salary of $50,000). Under Truist's average salary, each risk translates to $2,343 of annual productivity loss. Next, looking at the risk factors eliminated in Table 1 and excluding "Poor Health" as defined by Peak Health, this still results in 10,878 risks eliminated. From a productivity standpoint, this translates to more than $25.4 million in increased productivity annually.

Reduced Medical Costs

Taking a very conservative approach in terms of excess costs associated with modifiable risks, we can review three common risks which can be proven to be objectively eliminated – and for which recent research is available on excess costs: obesity, high blood pressure, and high blood glucose. Table 5 shows that the estimated aggregate annual savings for eliminating these three risks in a portion of the Truist population is more than $3.6 million.

Table 5: Excess Medical Cost Savings Associated With Elimination of Objectively Measured Risk Factors

Risk Factor	Initial # Starting Program With Risk Factor	Still At Risk	Risk Eliminated While In Program	% Risk Eliminated	Excess Annual Medical Cost Per Risk[1]	Total Excess Medical Costs Avoided
High Blood Glucose[2]	3,242	2,386	856	28%	$1,694	$1,450,064
Obesity[2]	5,158	3,373	1,785	35%	$1,000	$1,785,000
High Blood Pressure[2]	546	184	362	66%	$1,077	$389,874
TOTAL						$3,624,938

[1] Excess costs include medical expenditures such as inpatient care, outpatient care, emergency department visits, retail prescriptions, and preventive care.
[2] Based on several sources included in the references, the costs associated with certain modifiable risk factors are as follows:
   * Obesity: $1,000 [Goetzel, 2020]
   * High Blood Pressure: $1,077 [Kowlessar, 2011]
   * High Blood Glucose: $1,694 [Goetzel, 2020]

Additionally, it is worthwhile to consider other modifiable risk factors that do impact excess healthcare costs, even though their measures may be subjective. Specifically, we have looked at tobacco use and activity, both of which are self-reported. Admittedly, program participants could fail to report their continued tobacco use or physical inactivity in order to please their nurse and/or earn their premium contribution discount. We assume, however, that the majority of participants would accurately report their actual wellness activities (or lack thereof) and as importantly be motivated to do the right thing for their own health and wellness. Under that positive assumption, Table 6 shows that almost an additional $2.6 million in excess medical claim costs could be attributable to the elimination of these risk factors. Combining these objective and subjective risk factors, the estimated annual savings from reducing excess medical costs is $6.2 million.

Table 6: Excess Medical Cost Savings Associated With Elimination of Subjectively Measured Risk Factors

Risk Factor	Initial # Starting Program With Risk Factor	Still At Risk	Risk Eliminated While In Program	% Risk Eliminated	Excess Annual Medical Cost Per Risk[1]	Total Excess Medical Costs Avoided
Using Tobacco[2]	1,082	494	588	54%	$659	$387,492
Inactive[2]	5,938	703	5,235	88%	$421	$2,203,935
TOTAL						$2,591,427

[1] Excess costs include medical expenditures such as inpatient care, outpatient care, emergency department visits, retail prescriptions, and preventive care.
[2] Based on several sources included in the references, the costs associated with certain modifiable risk factors are as follows:
   * Smoking: $659 [Adams, 2020]
   * Sedentary Lifestyle: $421 [Goetzel, 2020]

Aggregating just the benefits of increased productivity ($25.4 million) and the conservative estimate of decrease in excess medical expenses ($6.2 million), **the total annual financial benefit for Truist's Peak Health program exceeds $31.6 million**.

While this case study includes conservative financial impact estimates, it is worthwhile to reflect on the comments of Steve Reeder, EVP at Truist, and Director of Well-being who has witnessed firsthand the impact of the program on Truist (formerly BB&T) employees and the health plan for over three decades, Steve's comment (see the testimonial on this page) that the program has reduced medical claims by over 10% annually further accentuates the program's financial impact.

Conclusion

In summary, whether considering critical factors important to the employer, the employees, or both, the Peak Health program has proven highly beneficial to Truist. The sustained results also support maintaining the wellness program in order to continue realizing these benefits.

"The Peak Health program helps drive real behavior change by empowering people with information about their health.

It also establishes a bond between the employee and the nurse, such that the employees not only understand what they should do to improve their health and well-being, but also commit to accomplishing their goals by their next meeting.

We see significant engagement of high risk employees who would benefit from interventions, and this has led to more than a 10% reduction in annual medical claims."

– Steve Reeder, EVP,
Director of Benefits

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